DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010494 Address: 333 Burma Road **Date Inspected:** 07-Dec-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No Li Yang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

> 34-0006 **Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

Bridge No:

This QA Inspector performed MT of area previously tested and accepted by Quality Control on OBG 5AW. MT was performed on Diaphragms on Panel Points (PP) 30~35 (repaired areas). QA Inspector observed two longitudinal linear indications, measuring approximately between 8mm and 11mm in length respectively at pp 30 and 31. The QA Inspector generated a TL-6028 MT report on this date. Weld MT verified was identified as listed below

5AW

- 1. SSD13-PP30-004 (Diaphragm to Floor Beam)
- 2. SSD14-PP31-005 (Diaphragm to Floor Beam)

This QA Inspector issued an incident report on the above noted MT rejections.

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6CE

FCAW repair welding on weld joints 037~048 located at BP115-001 bottom plate stiffeners.

Welder is identified as Mr. Zhou Bin (067947). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

FCAW repair welding on weld joints 005 and 006 located at OBE6C.

Welder is identified as Mr. Zhang Hanming (220066). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-B-T-2231T.

FCAW repair welding on weld joints 005 and 006 located at OBE6C.

Welder is identified as Mr. Li Guimin (220069). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-B-T-2231T.

6BE

FCAW repair welding on weld joints 037~048 located at BP168-001 bottom plate stiffeners.

Welder is identified as Mr. Zhao Aifei (067942). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-B-T-2132.

6BE+6CE

SMAW tack welding on weld joints 034, 035 and 036 located at SP427-001 edge to deck cross beam side of segment. Welder is identified as Mr. Li Guimin (220069). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-B-U2-F.

SMAW tack welding on weld joint 005 located at OBE6A on cross beam side of segment. Welder is identified as Mr. Li Guimin (220069). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-B-T-2233T.

5BE+5CE

SMAW repair welding on weld joint 008 located at OBE5 deck plate weld splice. Welder is identified as Mr. Du Hengyou (037743). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and WR repair procedure #8820.

SMAW repair welding on weld joint 008 located at OBE5 deck plate weld splice. Welder is identified as Mr. Qie Jianzhou (067571). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and WR repair procedure #8820.

6BE

FCAW repair welding on weld joint 002 located at CA022 deck plate to edge plate. Welder is identified as Mr. Jiang Zhen (068917). ZPMC QC is identified as Li Yang. The welding variables

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recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.

6AW

FCAW repair welding on weld joints 15 and 16 located at DP622-001 deck plate stiffener.

Welder is identified as Mr. Gang Huaigang (037840). ZPMC QC is identified as Li Yang. The welding variables recorded by QC appeared to comply with WPS-B-T-2214-FCM-1.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations and MT indications are as followed:

5BE+5AE

1. Segment splice weld on side plate (cross beam side) and bottom plate.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer